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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,542	11/05/2003	Colin P. Garner	00-292	8262

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PATENT DEPT.
PEORIA, IL 616296490

EXAMINER

LAWRENCE JR, FRANK M

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 03/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/701,542

Applicant(s)

GARNER ET AL

Examiner

Frank M. Lawrence

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 31-36 is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 10/031,214.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: The first paragraph of the specification should be amended to include the current patent number of the parent application.

Appropriate correction is required.

Information Disclosure Statement

2. Applicant is requested to submit an information disclosure statement listing the references cited in the parent application if their consideration is desired.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-26 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16, 20, 22, 24 and 28-32 of U.S. Patent No. 6,660,068. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patented claims fully encompass and envision all of the limitations

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of the instant claims. One having ordinary skill in the art would understand that the invention would function with the varying filter thicknesses claimed.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-8, 11-15, 20-28 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 94/07008.

7. WO '008 teaches a system for removing particulates from a gas stream, comprising providing a ceramic filter (20) that includes tubular cells defined by porous ceramic walls, providing several point or plate shaped first electrodes (2,3,4) disposed at a first end and side of the filter, providing a plurality of point or plate shaped counter electrodes (5,6) at a second end and side of the filter, providing an AC voltage from a source to the electrodes to produce an arc discharge to regenerate the filter, and providing a capacitor (8-11) between the voltage source and electrodes for regulating current, wherein the voltage is provided at a frequency of 5-20,000 Hz and an output of 2-25 kV (see abstract, figures, p. 14, lines 12-27, p. 16, line 24 to pl. 17, line 9).

8. Claims 1-3, 6-9, 11-13, 20, 21, 23-27 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Henkel (5,044,157).

9. Henkel '157 teaches a system for removing particulates from a gas stream, comprising providing a metallic filter (4) providing a cylindrical plate shaped first electrode (9) disposed at a

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first end and side of the filter, providing a fleece counter electrodes (2) at a second end and side of the filter, providing an AC voltage from a source to the electrodes to produce an arc discharge from any location along the electrodes to regenerate the filter, and providing spacer disks (14,15) for electrically stabilizing the electrode arrangement, wherein the voltage is provided at a frequency of 20 kHz and an output of 20 kV (see figures, col. 3, line 6 to col. 4, line 29).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO '008 in view of Woodhouse (4,954,263).

12. WO '008 discloses all of the limitations of the claim except that the stabilizing means is a resistor. Woodhouse '263 discloses a fluid treatment system having electrodes that are connected by a wire that includes a resistor (17) (col. 2, lines 26-65). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the stabilizer of WO '008 by including a resistor in order to provide a means that can control and stabilize the current flow in the circuit.

Allowable Subject Matter

13. Claims 31-36 are allowed.

14. The following is an examiner's statement of reasons for allowance: The prior art of record fails to disclose or suggest an apparatus as described in claim 31, wherein there is a

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stabilizing impedance positioned electrically between the AC voltage source and locations on the electrode arrangement at which the glow discharges occur. The closest prior art discloses either using a capacitor or a resistance that is not between the voltage source and electrode arrangement points.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional references listed on the attached PTO-892 form disclose gas filtration systems with regenerative systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank M. Lawrence whose telephone number is 571-272-1161. The examiner can normally be reached on Mon-Thurs 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frank M. Lawrence
Primary Examiner
Art Unit 1724

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Frank Lawrence
3-16-05